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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,085	08/22/2001	Rudiger Schutte	32301W198	7366
7590 03/17/2006 Smith, Gambrell & Russell, LLP Suite 800 1850 M Street, N.W. Washington, DC 20036			EXAMINER LEUNG, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/934,085

Applicant(s)

SCHUTTE ET AL.

Examiner

Jennifer A. Leung

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the same reasons set forth in the final Office action.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☒ Other: PTO-892

*Hien Tran*  
**HIEN TRAN**  
**PRIMARY EXAMINER**

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**Continuation of Item 11.**

The request for reconsideration has been considered, but it does not place the application in condition for allowance for the same reasons set forth in the final Office action.

Comments regarding Schubert et al. (US 5,803,600).

Applicants (beginning on page 2, third paragraph) argue that Schubert fails to show reaction spaces that are “slot-shaped” because the reaction spaces of Schubert comprise “channels” formed by grooves cut into the surface of the wall elements. In particular, Applicants argue that one of ordinary skill in the art would have interpreted a “slot-shape” to exclude slots that are formed by channels, in view of the disclosure.

The Examiner respectfully disagrees and maintains that the apparatus of Schubert et al. structurally reads on the claims. It is noted that the features upon which applicant relies (i.e., a reaction space formed between the surfaces of two wall elements, excluding embodiments with reaction channels formed by grooves) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is further noted that Applicants’ description of what constitutes a “slot-shape” is in direct contradiction to the dictionary-defined term of a “slot” (The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000).

slot *n.* A narrow opening; a groove or slit:  
*a slot for coins in a vending machine; a mail slot.*

One of ordinary skill in the art would have considered reaction spaces **12a** (FIG. 3b) of Schubert et al. to comprise the shape of a slot, given that the reaction spaces are formed by grooves.

Applicants (page 5, second paragraph) further argue that the Examiner has misconstrued the word “interchangeably”. The Examiner respectfully disagrees and maintains that the apparatus of Schubert et al., wherein one wall element **12b** may be substituted for another wall element **12b** in constructing the block (due to their identical configuration), structurally meets the claim. It is noted that the features upon which applicant relies (i.e., wall elements not permanently bonded together) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Comments regarding Ashmead et al. (US 5,690,763).

Applicants (beginning on page 6, last paragraph) argue that one of ordinary skill in the art at the time the invention was made would not have had motivation to select the claimed geometries for the wall elements and heat exchanger cavities in the apparatus of Ashmead. The Examiner

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respectfully disagrees and further recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either *in the references themselves or in the knowledge generally available to one of ordinary skill in the art*. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Ashmead reference (column 5, lines 57-64; also column 6, lines 23-40) specifically suggests that other geometries are suitable, depending on the "compatibility with the chemical process." In particular,

"... one skilled in the art can design an apparatus having the requisite size, shape and throughput of tortuous channel and the number, and geometry, of the various laminae."

"As used herein the term "compatibility with the chemical process" includes... required features to be created in the lamina, including size, geometrical shape and precision."

It has further been held that changes in shape involves only ordinary skill in the art. *In re Dailey* 149 USPQ 47, 50 (CCPA 1966); *Glue Co. v Upton* 97 US 3, 24 (USSC 1878)). A paralleliped shape can simply be formed by modifying the geometry of the various circular laminae as shown to comprise rectangular or square shaped laminae. The Examiner asserts that reactors comprising rectangular or square shaped laminae are well known in the art (see e.g., Schubert et al., Vu et al. and Alagy et al.).

Comments regarding Vu et al. (US 4,820,495) in view of Alagy et al. (US 4,973,777).

Applicants (beginning on page 10, fourth paragraph) argue that one of ordinary skill in the art would not have looked to the teachings of Alagy et al. to modify the apparatus of Vu et al. to comprise reaction spaces having a slot width in the range of 0.05 to 5 mm. The Examiner respectfully disagrees and maintains that the motivation arises from Alagy's teaching that a slot width ranging from 3 to 50 mm provides good temperature stability to the reaction zone (see column 8, lines 7-17). Although the apparatus of Vu et al. structurally differs from the apparatus of Alagy, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).



**HIEN TRAN**  
**PRIMARY EXAMINER**

Jennifer A. Leung  
March 13, 2006 